

GOROKHOD, L. L., SUPONITSKIY, M. YA.

"Problems of labor hygiene on cattle farms."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists and Infectionists, 1959.

GOROKHOLINSKIY, N.

Seminar for grain dryers. Muk.-elev. prom. 27 no.4:29 Ap '61.
(MIRA 14:7)

1. Altayskoye kravevaya upravleniye khleboproduktov.
(Grain--Drying)

VITTIKH, M.V.; GOROKHOLINSKIY, Yu.S.

Ural Scientific and Industrial Conference on Ion Exchange
Resins. Plast.massy no.3:77-79 '60. (MIRA 13:6)
(Ion exchange—Congresses) (Resins, Synthetic)

GOROKHOV, A.F., general-polkovnik artillerii v otstavke

Remarkable victory near Moscow. Vest.protiyovozd.obor. no.12:71-74
D '61. (MIRA 15:3)

(Moscow, Battle of, 1941-1942)

GOROKHOV, A.M., putevoy rabochiy; BESEDOVSKIY, D.A.; TARASOV, A.I.; KRIVOBOK, G.K.; MOISEYENKO, A.D., inzh.-mekhanik; YUR'YAKS, P.I. [Jurjaks, P.]; IBRAĖIMOV, A.A.; SAFRONOV, V.S.; SHAROV, N.N.

Letters to the editor. Put' i put.khoz. 7 no.4:40-42 '63.

(MIRA 16:3)

1. Stantsiya Talovaya, Yugo-Vostochnoy dorogi (for Gorokhov).
2. Nachal'nik distantsii zashchitnykh lesenasazhdeniy, stantsiya Atkarsk, Privolzhskoy dorogi (for Besedovskiy).
3. Nachal'nik putevoy mashinnoy stantsii, stantsiya L'gov, Moskovskoy dorogi (for Tarasov).
4. Sekretar' partiynoy organizatsii stantsii Nikitovka, Donetskoy dorogi (for Krivobok).
5. Stantsiya Nikitovka, Donetskoy dorogi (for Moiseyenko).
6. Brigadir puti, stantsiya Platone, Pribaltiyskoy dorogi (for Yur'yaks).
7. Zamestitel' nachal'nika distantsii, Sal'yany, Zakavkazskoy dorogi (for Ibragimov).
8. Starshiy normirovshchik, stantsiya Rtishchevo, Privolzhskoy dorogi (for Safronov).
9. Sekretar' partiynoy organizatsii, stantsiya Rtishchevo, Privolzhskoy dorogi (for Sharov).

(Railroads—Maintenance and repair)

GOROKHOV, A.M., putevoy rabochiy

Eliminate the shortcomings. Put' i put. khoz. 7 no.5:44-45 '63.
(MIRA 16:7)

1. Stantsiya Talovaya, Yugo-Vostochnoy dorogi.
(Railroads—Maintenance and repair)

GOROKHOV, Aleksandr Nikolayevich; KARPOV, V.V., kandidat tekhnicheskikh nauk, nauchnyy redaktor; KAPLAN, M.Ya., redaktor izdatel'stva; PUL'KINA, Ye.A., tekhnicheskiy redaktor

[Mixed brigade of stone masons operating as independent budget units]
Komplekssnaya khosraschetnaya brigada kamenshchikov. Leningrad, Gos.
izd-vo lit-ry po stroit. i arkhiterture, 1956. 38 p. (MLRA 10:1)
(Construction industry)

ABRAMOV, I.D.; GOROKHOV, A.N.

The IO-6 unit for artificial pollination of vineyards. Biul.
tekh.-ekon. inform. Gos. nauch.-issl. inst. nauch. i tekhn.
inform. 17 no.4:60-61 Ap '64. (MIRA 17:6)

~~A.S.~~ Gorokhov, A. S.

AID P - 3996

Subject : USSR/Hydr. Eng.

Card 1/1 Pub. 35 - 3/18

Authors : Iorish, E. L. and V. A. Melent'yev, Kand. Tech. Sci.
and A. S. Gorokhov, Eng.

Title : Damming up of the Dnepr River at the Dubossary Hydro
Power Plant Construction in 1954.

Periodical : Gidro. stroi., 8, 9-13, 1955

Abstract : The earth fill method of construction is reported in
detail and strongly recommended. Three figures.
Five Russian references, 1941-1954, 2 English, 1952-
1953.

Institution : None

Submitted : No date

KORSHIKOV, G.V., inzh.; VORONOV, Yu.G., inzh.; TSEYTLIN, M.A., inzh.;
KIYASHKO, Yu.M., inzh.; GOROKHOV, A.S., inzh.; SEKACHEV, M.A.,
inzh.; Prinsipali uchastiye: ARSHINOV, G.P.; GRIGOR'YEV, Ye.I.;
KUVARIN, Yu.N.; RUDAKOV, N.V.; BUYEV, V.Ye.; IOGL'NITSYN,
A.N.

Investigating the oxidizing zone of a blast furnace working
under oxygen-enriched blowing (35% oxygen) and using natural
gas. Stal' 25 no.8:781-790 S '65. (MIRA 18:9)

GOROKHOV, B.M., inzh.

Use of polymers in construction equipment and road machinery.
Stroi. i dor. mash. 10 no.6:33-34 Je '65. (MIRA 18:8)

GOROKHOV, B. N.

PA 38T22

USSR/Engineering

Vehicles - Transportation
Road Building Machinery

Sep/Oct 1946

"Motor Transportation Utilizing the GAZ-AA Kerosene
Powered Engine," B. N. Gorokhov, Engr, TsKB MS and
EM, 1 p

"Mekhanizatsiya Stroitel'stva" No 9/10

Briefly describes this new type of powered prime mover
which is used solely by the Ministry of Transportation,
especially for the moving of wheeled equipment at
road-construction sites. Compares the GAZ-AA to the
Dayts, another engine which is popularly used at
present.

38T22

LC

GOROKHOV, B. N.

PA 15/49 T68

USSR/Engineering
Bulldozers
Road Scrapers

Jul 48

"Scraper and Bulldozer Built for the STZ-3 Tractor,"
B. N. Gorokhov, Engr, 1 3/4 pp

"Makh Stroi" No 7

General description of scraper and bulldozer. Two
photographs of each.

15/49 T68

GOROKHOV, B.N.

BORODACHEV, I.P., kandidat tekhnicheskikh nauk; GARBUSOV, Z.Ye., inzhener;
redaktor; GOROKHOV, B.N. laureat Stalinskoy premii, inzhener;
KOSTIN, M.I., inzhener; POPOV, N.I., inzhener; PRUSSAK, B.N.,
inzhener; SHIMANOVICH, S.V., inzhener; PETERS, Ye.R., kandidat
tekhnicheskikh nauk, retsenzent; KRIMERMAN, M.N., inzhener,
redaktor; MODEL', B.I., tekhnicheskii redaktor.

[Machines for constructing irrigation systems] Mashiny dlia
soorusheniia orositel'nykh sistem. Pod red. Z.E.Garbusova.
Moskva, Gos.nauchno-tekhn.izd-vo mashinostroitel'noi lit-ry,
1951. 236 p. (MLRA 9:1)
(Irrigation)

GOROKHOV, D.I.; GOVORUKHIN, A.P.; SMELAYA, T.V.; PSHENICHNAYA, A.M.;
ZAYTSEVA, M.B.; Prinimali uchastiye: KALASHNIKOV, N.V.;
FLAKSINA, A.I.. PORTNYAGIN, I.I., otv.red.; ROGOVSKAYA, Ye.G.,
red.; VOLKOV, N.V., tekhn.red.

[Agroclimatic reference book on Tambov Province] Agroklimate-
cheskii spravochnik po Tambovskoi oblasti. Leningrad, Gidro-
meteor.isd-vo, 1959. 123 p. (MIRA 13:2)

1. Kursk. Gidrometeorologicheskaya observatoriya. 2. Upravle-
niye gidrometalushby Tsentral'no-Chernozemnykh oblastey (for
Gorokhov, Govorukhin, Smelaya, Pshenichnaya, Zaytseva).
(Tambov Province--Crops and climate)

KARASEV, L.V.; GOROKHOV, G.A., slesar'; KALININ, V.P., slesar'.

Remodeling small PD trimmers. Suggested by L.V.Karasev, G.A.
Gorokhov, V.P.Kalinin. Rats.i isobr.predl.v stroi. no.14:
28-30 '60. (MIRA 13:6)

1. Glavnyy mekhanik derevoobdelochnogo zavoda No.3 tresta
Stroydetal'-shoydetal'-82 Glavleningradstroya (for Karasev).
(Saws)

UDACHIN, S.A., prof.; TSFASMAN, Ya.M., dots.; CHESHIKHIN, G.V., prof.;
PROKHONOV, N.I., prof.; GOROKHOV, G.I., prof.; BURIKHIN, N.N.,
prof.; OZEROV, V.N., red.; DEYEVA, V.M., tekhn. red.

[Planning land utilization] Zemleustroitel'noe proektirovanie.
Izd.4., perer. i dop. Moskva, Sel'khozizdat, 1962. 463 p.
(MIRA 15:11)

(Rural planning)

GOROKHOV, G. I.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

<u>Name</u>	<u>Title of Work</u>	<u>Nominated by</u>
Udachin, S. A.		
Cheshikhin, G. V.		
Prokuronov, N. I.		
Tsfasman, Ya. M.		
Burikhin, N. N.		
Baranchuk, A. M.		
Maslov, A. V.		
<u>Gorokhov, G. I.</u>	"Planning Of Land Organization"	Moscow Institute of Land Management Engineers

SO: W-30604, 7 July 1954

GOROKHOV, G.I.

We are improving horizontal percolation. Gidroliz.i lesokhim.prem.
9 no.1:19 '56. (MLRA 9:6)

1.Arkhangel'skiy gidroliznyy saved.
(Hydrolysis)

GOROKHOV, Georgiy Il'ich; RAKITINA, Ye.D., redaktor; GUREVICH, M.M., tekhnicheskii redaktor

[Land organization on collective farms] Vnutrikhoziaistvennoe zemle-
ustroistvo kolkhov. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1956.
294 p.

(MLBA 10:4)

(Farm management) (Collective farms)

C. C. R. H. C. I.

BARSUKOV, N.I., kand.sel'skokhozyaystvennykh nauk; KIZYURIN, A.D., doktor sel'skokhozyaystvennykh nauk; BORINEVICH, V.A., kand.sel'skokhozyaystvennykh nauk; BORMUSOVA, S.H., agronom; VERMENICHEVA, H.D., kand.sel'skokhozyaystvennykh nauk; GESHELE, E.E., doktor biol. nauk; GOROKHOV, G.I., kand.sel'skokhozyaystvennykh nauk; GUBKIN, S.M., kand. veterinarnykh nauk; YELYKOVA, L.I., kand.sel'skokhozyaystvennykh nauk; KOTT, S.V., doktor biol. nauk; KOCHKINA, V.A., agronom; LAMBIN, A.Z., doktor biol.nauk; LEBEDEVA, Ye.M., agronom; MALAKHOVSKIY, A.Ya., doktor sel'skokhozyaystvennykh nauk; MAYBORODA, N.M., kand. sel'skokhozyaystvennykh nauk; MAYDANYUK, A.E., zootekhnik; OVSYANNIKOV, G.Ye., kand.sel'skokhozyaystvennykh nauk; PETROV, F.A., kand.biol.nauk; POGORELOV, P.F., agronom; POLKOSHNIKOV, M.G., dotsent; RENARD, G.K., kand. sel'skokhozyaystvennykh nauk; RUCHKIN, V.N., prof.; SADYRIN, M.M., kand.sel'skokhozyaystvennykh nauk; TOBOL'SKIY, V.YA., vetvrach; TYAZHEL'NIKOV, S.D., kand.sel'skokhozyaystvennykh nauk; UKHIN, I.I., kand.sel'skokhozyaystvennykh nauk; FEDOROV, G.V., kand.sel'skokhozyaystvennykh nauk; CHIRKOV, D.I., zootekhnik; TSINGOVATOV, V.A., prof.; SHVETSOVA, A.N., kand.sel'skokhozyaystvennykh nauk; SHEVLYAGIN, A.I., kand.sel'skokhozyaystvennykh nauk; SEMENOVSKIY, A.A., red.; GOLUBINSKAYA, Ye.S., red.; NECHAYEVA, Ye.G., red.; PERESYPKINA, Z.D., tekhnicheskii red.

[Siberian agronomist's reference manual] Spravochnaya kniga agronoma Sibiri. Moskva, Gos. izd-vo sel'khoz. lit-ry, Vol.2. 1957. 839 p.
(Siberia--Agriculture) (MIRA 11:3)

MASLOV, Aleksey Vasil'yevich; GOROKHOV, Georgiy Il'ich; ORLOV, P.M., prof.,
retsenzent; ZUBRITSKIY, I.V., prof., retsenzent; ~~GRIGINA, A.I.~~,
red.isd-va; ROMANOVA, V.V., tekhn.red.

[Geodesy] Geodesiia. Moskva, Izd-vo geod.lit-ry. Pt.3. 1959.
171 p. (MIRA 12:12)

(Surveying)

GOROKHOV, G.I.; KORSAKOV, I.V.

Mastering the technology of the production of food glucose from wood.
Gidroliz.i lesokhim.prom. 13 no.5:26-30 '60. (MIRA 13:7)

1. Kanskiy gidroliznyy zavod.
(Kansk--Glucose) (Hydrolysis)

GORONHOV, G. I. (Kansk-Hydrolytic Plant)

"Technology of liberating crystalline glucose from acid-salt hydrolysates of wood by means of the binary compound"

Report presented at the Conference on the Theory and Technology of Crystalline Glucose Production, Leningrad, March 1961 (Reported in Gidrol i lisokhin, 4, 1961)

GOROKHOV, G.I.

Struggling for the fulfillment of the seven-year plan ahead of
time. Gidroliz. i lesokhim.prom. 17 no.1:21-24 '64.

(MIRA 17:4)

1. Kanskiy gidroliznyy zavod.

MASLOV, Aleksey Vasil'yevich; GOROKHCV, Georgiy Il'ich;
KUROPATENKO, F.K., prof., retsenzent; TYUTYUNIKOV,
Ya.M., retsenzent

[Geodesy] Geodeziia. Moskva, Nedra. Pt.3. Izd.2.,
perer. i ispr. 1964. 185 p. (MIRA 18:1)

GOROKHOV, I., inzh. (Zhdanov); GRANKOV, L., inzh. (Zhdanov); RAKHMANOV, N.,
inzh.-mayor, izobretatel'; BASKAKOV, Yu. (Chernogorsk); PERPIL'YEV,
N. (Moskva); GLINCHEVSKIY, V. (Penza); KORNEV, M., inzh. (Kiyev);
MIKHAREV, P., konstruktor (Orenburg*); D'YACHKOV, M. (Irkutsk)

How interesting! Izobr.i rats. no.1:19 '63.

(MIRA 16:3)

1. Nachal'nik Penzenskogo byuro po delam ratsionalizatsii
i izobretatel'stva (for Glinchevskiy).

(Technological innovations)

SLONIM, Asir Isidorovich; RUBCHINSKIY, A.M., kand. ekon. nauk,
retsenzent; GOROKHOV, I.A., nauchnyy red.; APTEKMAN, M.A.,
red.; TSAL, R.K., tekhn. red.

[Organization of the technical preparation of production in
the instrument industry] Organizatsiya tekhnicheskoi podgotov-
ki proizvodstva v priborostroenii. Izd.2., perer. i dop. Le-
ningrad, Sudpromgiz, 1962. 177 p. (MIRA 15:10)
(Instrument industry)

GOROKHOV, I.G., KARAVAYEVA, Z.F., KOZLOV, F.M., ARTAMONOV, G.V., red.;
SHAMAROVA, T.A., red, izd-va., ROMANOVA, V.V., tekhn. red.

[Maps and atlases; a catalog] Karty i atlasyy; katalog. [Moskva]
Glavknigotorg M-va kul'tury SSSR, 1958. 105 p. [Order blanks for the
catalog "Maps and Atlases."] Zakaz po katalogu "Karty i atlasyy."
1958. 42 p. (MIRA 11:9)
(Bibliography--Maps)

GOROKHOV, I.L.

"Organization and planning of production in pulp and paper mills" by S.Sominskii and others. Reviewed by I.L.Gorokhov. Bum. prom. 34 no.6:31-32 Je '59. (MIRA 12:10)

1. Zamestitel' nachal'nika planovo-ekonomicheskogo otдела
Kalinin-gradskogo sovnarkhoza.
(Woodpulp industry) (Paper industry)
(Sominskii, V.S.)

GOROKHOV, I.

Studying conditions of a small river with students. Geog. v
shkola 22 no.2:60-63 Mr-Apr '59. (MIRA 12:6)

1. 5-ya shkola Kasani.
(Physical geography--Study and teaching)
(Rivers)

OBLIZOV, A.I.; GOROKHOV, I.K.; YABLOKOV, V.A. (Moskva)

Attachment for stitching lavsan-containing fabrics on
general-purpose sewing machines. Shvein. prom. no. 1:30-32
Ja-P '65. (MIRA 18:4)

YASHCHENKO, M.L.; VARSHAVSKAYA, E.S.; GOROKHOV, I.M.

Anomalous isotopic composition of strontium in minerals from
metamorphic rocks. Geokhimiia no.5:420-425 '61. (MIRA 14:5)

1. Laboratory of the Geology of Precambrian, Academy of Sciences
U.S.S.R., Moscow.

(Strontium—Isotopes)
(Metamorphism (Geology))

GOROKHOV, I.M.

Some initial errors in the determination of absolute
geological age by the strontium method. Geokhimiia no.9:
812-820 '61. (MIRA 15:2)

1. Laboratory of Geology of the Presambrian Academy of
Sciences U.S.S.R., Leningrad.

(Geological time)
(Strontium)

BOBISOVA, K.D.; GORCHENOV, I.M.; LOBACH-ZHUCHENKO, S.B.

Accessory minerals of metasomatic Archean gneissose granites as
revealed by the one of central Karelia regions. Trudy Lab.geol.
dokem. no.12:238-256 '61. (MIRA 14:11)
(Karelia—Minerals)

ARTEMOV, Yu M.; GOROKHOV, I.M.

Change of the primary Sr^{87} content for granitoids during the geological time. Geokhimiia no.5:481-482 My '64. (MIRA 18:7)

1. Laboratoriya geologii dokembriya AN SSSR, Leningrad.

GERLING, E.K.; VARSHAVSKAYA, E.S.; GORCKHOV, I.M.

Attempt to determine the age of the enclosing rocks of Monchegorsk nickel-bearing pluton using K-Ar and Rb-Sr methods. Geokhimiia no.6:500-504 Je '64.
(MIRA 18:7)

1. Laboratoriya geologii dokembriya AN SSSR, Leningrad.

GOROKHOV, I.M.

Rb-Sr age of granites in Bektauata (central Kazakhstan). Izv. AN
SSSR. Ser. geol. 29 no.8:94-97 Ag '64. (MIRA 17:11)

1. Laboratoriya geologii dokembriya AN SSSR, Leningrad.

YASHCHENKO, M.L.; GOROKHOV, I.M.; LOBACH-ZHUCHENKO, S.B.

Investigation of the processes of "rejuvenation" in the basement rocks of Karelian folds in Karelia using Sb-Sr and K-Ar methods. Izv. AN SSSR. Ser. geol. 29 no.12:18-32 D '64. (MIRA 18:1)

1. Laboratoriya geologii dokembriya AN SSSR, Leningrad.

~~GOROKHOV~~

My suggestions. Avtom., telem. i sviaz' 2 no.5:40 My '58.
(MIRA 11:5)

1. Starshiy elektromekhanik Kalininskoy distantssii signalizatsii
i svyazi Oktyabr'skoy dorogi.
(Railroads--Electric equipment)

GOROKHOV, I.V.

Excursion to a fur combine. Geog.v shkole 24 no.3:61-63 My-Je '61.
(MIRA 14:5)

1. 18-ya shkola Kazani.

(Kazan--Fur) (School excursions)
(Kazan--Economic geography--Study and teaching)

KOZLOV, Vasilii Petrovich; OBLEZOV, Aleksandr Ivanovich;
GOROKHOV, Ivan Kuz'mich; RYCHKOVA, O.I., red.;
VINOGRADOVA, G.A., tekhn. red.

[Semiautomatic Class 95 PMZ machine for sewing on buttons and Class 59-A PMZ machine for reinforcing button shanks] Poluavtomaty 95 klassa PMZ dlia prishivaniia pugovits i 59-A klassa PMZ dlia obvivki stolki pugovitsy. Moskva, Gizlegprom, 1963. 58 p. (MIRA 17:3)

GOROKHOV, K.D., slesar'; BALANOV, A.M., inzh.

Automatic flow-line equipment for processing straight barlike wooden details. Suggested by K.D.Gorokhov, A.M.Balanova. Rats.1 izobr.predl.v stroi. no.14:23-25 '60. (MIRA 13:6)

1. Fabrika myagkoy mebeli Rostovskogo sovnarkhosa, Rostov-na-Donu, ul. Voyennaya, 70.

(Woodworking machinery)

ACC NR: AP7001530

SOURCE CODE: UR/0193/66/000/012/0043/0045

AUTHOR: Shibarov, G. P. (Candidate of technical sciences); Gorokhov, K. N.;
Shibanova, Ye. T.; Milokhin, N. T. (Candidate of technical sciences)

ORG: none

TITLE: Device for centralized measurement of hourly liquid flow

SOURCE: Byulleten' tekhniko-ekonomicheskoy informatsii, no. 12, 1966, 43-45

TOPIC TAGS: flow meter, transistorized circuit, *pressure transducer*

ABSTRACT: A device designed to measure hourly liquid flow is described. The device consists of transducers for volumetric liquid flow, shaper and Schmidt trigger circuits, two gate circuits, an amplifier, a PSM-2 relay, and two solenoid switches. Testolite measuring disks 100 mm in diameter are fastened to the output cylinders of the transducers. Permalloy plates (5 x 5 mm) are glued to the front faces of the measuring disks. The device has six measuring scales marked on the cylindrical surface of a transparent drum rotated by a DSD-2-P1 electric motor. Rotation of the measuring disks causes distortions in a magnetic field; the distortions are processed by the logic circuitry and are used to change the position of the rotating drum. The device is capable of measuring liquid consumption rates from 250 to 20,000 l/hr with an accuracy of 0.5-1%. It uses d-c voltages of -24, +12, -12 and 1.2 v and 60 cps, 220 v a-c voltage to power its transistorized circuits and its motor. The

Card 1/2

UDC: 681.121

ACC NR: AP7001530

device has a total power consumption of 100 w, overall dimensions of 350 x 300 x 250 mm, and weighs 5 kg. Orig. art. has: 1 figure.

SUB CODE: 09/4/SUBM DATE: none/

Card 2/2

GOROKHOV, L.N.

ShVI electric screw spike driver. Put'i put.khoz. 4 no.7:35-36
Jl '60. (MIRA 13:7)

1. Konstruktor Kaluzhskogo zavoda transportnogo mashinostroyeniya.
(Railroads--Equipment and supplies)

GOROKHOV, L.N.

20-5-37/60

AUTHOR
TITLEGEROVICH, M.A., KAGANOVICH, R.I., VERGELESOV, V.A., GOROKHOV L.N.
Use of the Labeled Atoms in Studying the Mechanism of the Anodic Liberation of Oxygen

PERIODICAL

(Primeneniye metoda mechenykh atomov k izucheniyu mekhanizma anodnogo vydeleniya kisloroda. Russian)
Doklady Akademii Nauk SSSR, 1957, Vol 114, Nr 5, pp 1049 - 1052(U.S.S.R.)

ABSTRACT

The opinion was expressed that the acid anion participates in the process of oxygen liberation on a platinum electrode. This is supposed to take place in concentrated solutions of sulphuric and chloric acid in connection with great anode polarizations. The authors assumed that it might be effective to use the acid labeled with heavy oxygen isotope O^{18} in checking this theory. It was expected that the oxygen liberated in the electrolysis of the labeled acid at low values of excessive voltage (to 0,9 V) would not contain any heavy isotope, whereas the oxygen liberated at higher values of excessive voltage which follow the abrupt rise of the polarization curve and are due to the adsorption of the acid anion would be enriched with O^{18} . The present paper reports data of a work in which the O^{18} -labeled chloric acid was used as electrolyte. The authors were guided by the fact that chloric acid, according to published data, does not show any oxygen-isotope exchange with water. This exchange takes place in the case of sulphuric acid, especially at elevated temperatures. From table 1 it may be seen that the oxygen liberated at an

Card 1/4

20-5-37/60

Use of the Labeled Atoms in Studying the Mechanism of the Anodic Liberation of Oxygen

excessive voltage up to 0,8 Volt does not contain any excess amounts of O^{18} . At higher excessive voltages (upper section of the curve) oxygen is enriched with the heavy isotope. Its content increases with increasing concentration of the acid anion and that of excessive voltage. From the data it follows that in the latter case a change in the mechanism of oxygen liberation takes place. This was caused by the participation of acid anions adsorbed on the electrode. According to BECK and MOLTEN the transition to the upper straight line is due to the discharge of ClO_2^- ions under formation of a ClO_2 -radical. From the viewpoint of data obtained by the authors this idea on the mechanism of the liberation of oxygen is not quite correct. For it was only at higher current densities ($3 \cdot 10^{-1} \text{ a/cm}^2$) that the authors could observe chlorine dioxide in the anolyte. At the same time the portion of the acid anion in the liberation of oxygen rose to 78 %. In more diluted solutions traces of the ClO_2^- -anion were detected (up to 0,2 % of the portion of the acid anion). The appearance of chlorine dioxide in the anolyte occurred at higher current densities than in the electrolysis of the 10 N-acid. With regard to these data it can be stated that until the polarization at which

Card 2/4

20-5-37/60

Use of the Labeled Atoms in Studying the Mechanism of the Anodic Liberation of Oxygen

chlorine dioxide appears the oxygen liberation, in spite of visible concentration of O_2 , does not take place because of ClO_2^- -ion discharge. The great increase of potential of the electrode apparently leads to a great deformation of the adsorbed anions. Therefore conditions are created for an exchange reaction of oxygen between the adsorbed anion and the surface oxide of platinum, in order to concentrate the O^{18} -isotope in the liberated oxygen. It is only at high current densities (of 10^{-1} a/cm² and more), at which another increase in the inclination of polarisation curves is observed, that a partial discharge of acid anion begins. It is accompanied by the formation of ClO_2^- -ions in the anolyte and by a liberation of ClO_2 . The water-oxygen which was distilled from the acid after electrolysis, was of a usual composition of isotopes. This indicates an absence of isotope exchange between the water and the products and semi-products of the electrolysis which are on the surface of the electrode. It further confirms the irreversibility of the electrochemical stadium of the formation of surface oxide. (1 illustration, 1 table, 3 Slavic references).

Card 3/4

20-5-37/60

Use of the Labeled Atoms in Studying the Mechanism of the Anodic Liberation of Oxygen

ASSOCIATION.

State University "M.V. LOMONOSOV", Moscow
(Moskovskiy gosudarstvennyy universitet im M.V. Lomonosova)
FRUMKIN, A.N., Member of the Academy
7.12.1956
Library of Congress

PRESENTED BY
SUBMITTED
AVAILABLE

Card 4/4

SOV/78-3-12-2/36

AUTHORS:

Gorokhov, L. N., Khodeyev, Yu. S., Akishin, P. A.

TITLE:

Mass Spectrometric Investigation of the Sublimation of Sodium Chloride (Mass-spektrometricheskoye issledovaniye sublimatsii khlorida natriya)

PERIODICAL:

Zhurnal neorganicheskoy khimii, 1958, Vol 3 Nr 12, pp 2597-2598 (USSR)

ABSTRACT:

The sublimation of sodium chloride was investigated using the mass spectrometric method. The NaCl^+ and Na_2Cl^+ ions were found in the mass spectrum, and at temperatures in the region of the melting point trace amounts of the Na_3Cl_2^+ ion were detected. These last ions form by a secondary reaction mechanism. In the temperature range 834-903°K, the average of the ratio $J_{\text{NaCl}^+}/J_{\text{Na}_2\text{Cl}^+} \approx 2$. Using the relationship $\lg(J_{\text{Na}_2\text{Cl}^+} \cdot T) - 1/T$ the heat of sublimation of the dimer form of the sodium chloride $\Delta H_2 = 55.3 \pm 1.0$ kcal/g mol was computed. The dissociation energy of the dimer form is $\Delta E = 45.6 \pm 1.8$ kcal. The results obtained

Card 1/2

SOV/78-3-12-2/36

Mass Spectrometric Investigation of the Sublimation of Sodium Chloride

for ΔH_1 and ΔH_2 agree with the data of the publications. The values for ΔH_1 and ΔH_2 are 51.1 and 55.5 kcal/mol, respectively. There are 10 references, 3 of which are Soviet.

SUBMITTED: December 3, 1957

Card 2/2

SOV/55-58-6-29/31

24(0) 5(4)

AUTHOR:

~~Gorokhov, N. N.~~

TITLE:

Use of an Effusion Double Chamber in the Mass-spectrometric Investigation of the Composition of Vapor (Primeneniye dvoynoy effuzionnoy kamery v mass-spektrometricheskikh issledovaniyakh sostava para)

PERIODICAL:

Vestnik Moskovskogo universiteta. Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, 1958, Nr 6, pp 231 - 233 (USSR)

ABSTRACT:

The mass spectrometric investigations of the composition of a vapor mixture are usually rendered more difficult by the fact that the mass spectra of the individual components e.g. the monomers and the dimers are superimposed. Besides for the determination of the contents of the various substances in the vapor, in the value of the ionization cross-sections of the different substances must be known. Generally, these cross-sections were calculated under the assumption of an additive composition of the ionization cross-sections of the atoms (Ref 2) combining to form the molecule. It is true that this assumption is sufficient for monomers and dimers, if the measurement is based on the determination of the effusion pressure of the individual components, this determination (Refs 3 and 4) being carried

Card 1/3

Use of an Effusion Double Chamber in the Mass-spectrometric SOV/55-58-6-29/31
Investigation of the Composition of Vapor

out with the aid of the effusion double chamber mentioned above. In case of mass spectra, not superposed, relatively good results were obtained. The general case, however, which is the object of this investigation, is that of the superposition of the spectra. In other terms, the spectrum must be decomposed. It is assumed that the vapor contains monomers and dimers and a separation is carried out of the superposed lines of the dimers and of the superposition of the monomer and the dimer. By means of the constant of equilibrium $K_p = p_D^2 / p_o = p_M^2 / p_D$, which is the same at various pressures (Equation 1) and with reference to the ratio of the partial pressures to the ratio of the intensities $p_D' / p_D = I_D' / I_D = n$ of a given line at the two temperatures involved (Equation 2) and by using the coefficient of proportionality between two lines of the dimer k (k is independent of the temperature), a system of equilibrium

Card 2/3

Use of an Effusion Double Chamber in the Mass-spectrometric Investigation of the Composition of Vapor

SOV/55-58-6-29/31

$$I_{M,D} = I_M + kI_D$$

$$I'_{M,D} = I'_M + kI'_D = \sqrt{n} I_M + nkI_D$$

is attained, from which the intensity of the various lines can be computed. From the temperature dependence of the intensities of the ion streams in the mass spectrum, the sublimation heat of the individual components can be computed separately. The author expresses his gratitude to P. A. Akishin for the scientific guidance of the investigation, and for his valuable advice. There are 5 references, 2 of which are Soviet.

ASSOCIATION: Kafedra fizicheskoy khimii (Chair of Physical Chemistry)

SUBMITTED: October 4, 1958

Card 3/3

5.2400(A)

67921

SOV/20-129-5-31/64

AUTHORS:

Akishin, P. A., Nikitin, O. T., Gorokhov, L. N.

TITLE:

Determination of the Heat of Sublimation of Boron¹ by the
Mass Spectroscopic Method²¹

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 5, pp 1075-1078
(USSR)

ABSTRACT:

The authors point to the literature data (Refs 1-5) on the sublimation heat of elementary boron which widely diverge. The value given by A. W. Searsy and C. E. Mayers (Ref 5) seems the most probable one, however, it needs further examination. The latter was made by the authors with the evaporation from an effusion chamber being combined with mass spectroscopic determination of the composition and with the determination of vapor pressure. The amorphous boron put at the disposal by A. F. Zhigach was transformed into crystalline boron by annealing in the vacuum at 2000-2100°K. The effusion chamber produced from tantalum or molybdenum was lined with pressed crystalline boron. The effusion chamber (Fig 1) was fitted into the vaporizer of an ion source of a mass spectrometer of type MS-3. Heating was made by electron bombardment, the chamber tempera-

Card 1/3

67921

SOV/20-129-5-31/64

Determination of the Heat of Sublimation of Boron by the Massspectroscopic Method

ture was determined by a pyrometer of type OPPIR-09 calibrated according to the pyrometer of type OP-48, on the basis of the luminescence of a blind channel drilled into the bottom of the chamber which emitted the radiation of an absolutely black body with sufficient accuracy. The apparatus will be described in the periodical "Pribery i tekhnika eksperimenta". The mass

spectra of vaporous boron contained only the ions $(B^{10})^+$ and $(B^{11})^+$. B_2^+ -ions were not observed. The absolute vapor pressure was measured according to the method by M. G. Inghram et al. (Refs 10,11). First, Ag was evaporated from the effusion chamber, then the sensitivity to boron was calculated on the basis of the sensitivity of the apparatus to Ag observed. The heat of sublimation ΔH_o^0 of boron was determined by the equation

$\Delta H_o^0 = (\Delta \bar{f}^* - R \ln p_B)$. $\Delta \bar{f}^* = \bar{f}_{gas}^* - \bar{f}_{solid}^*$ denotes the change of the reduced thermodynamic potential. The values \bar{f}_{gas}^* and

Card 2/3

\bar{f}_{solid}^* were put at the disposal by L. V. Gurvich. p_B denotes

67921

SOV/20-129-5-31/64

Determination of the Heat of Sublimation of Boron by the Masspectroscopic Method

the boron vapor pressure. Table 1 gives the results of an experiment, table 2 shows the total results from 7 experiments. Figure 2 shows the dependence of ΔH_o° on the logarithm of the parameter $\frac{S}{aK}$ of the chamber (a = area of the effusion opening, K = Klausung coefficient, S = evaporation surface). On the basis of the equation (3) mentioned in reference 14 the evaporation coefficient was calculated to be 0.2 - 0.3 in the temperature range 1600 - 2000°K. The value 131.6 ± 5 kcal/gram-atom is given as mean value for ΔH_o° from 7 experiments by taking into account the maximum possible experimental error. There are 2 figures, 2 tables, and 14 references, 2 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)

PRESENTED: July 16, 1959, by V. N. Kondrat'yev, Academician)

SUBMITTED: July 15, 1959
Card 3/3

AKISHIN, P.A.; GOROKHOV, L.N.; SIDOROV, L.N.

Mass-spectrometric study of the evaporation of sodium chloride
and lithium fluoride with the aid of a double effusion chamber.

Vest.Mosk.un.Ser.mat.,mekh.,astron.,fiz.,khim. no.6:194-204
'59. (MIRA 13:10)

1. Kafedra fizicheskoy khimii Moskovskogo universiteta.
(Evaporation) (Alkali metal halides)
(Mass spectrometry)

87372
S/120/60/000/004/011/028
E032/E414

5.5800 (1043, 1228, 1273)

AUTHORS: Akishin, P.A., Gorokhov, L.N., Nikitin, O.T. and
Khodeyev, Yu.S.

TITLE: Application of a Mass-Produced Mass-Spectrometer to the
Study of Evaporation of High Melting Point Materials

PERIODICAL: Pribery i tekhnika eksperimenta, 1960, No.4, pp.98-102

TEXT: One of the most effective methods of determination of the
composition of vapours and their thermodynamic characteristics
(pressure, heats of sublimation and dissociation) is the
combination of the Knudsen effusion method and the mass-
spectrometric analysis of the effusing vapour. The mass produced
mass-spectrometers MC -3 (MS-3), MC -4 (MS-4) and MM -1305 (MI-1305)
were designed for the isotopic analysis but with certain
modifications and improvements they can also be used to study the
properties of vapours of high melting point materials. These
modifications include the provision of an ion source incorporating
the effusion chamber whose temperature can be varied during the
experiment, the provision of a device which prevents the molecular
beam from reaching the ionization chamber so that the intensity of
a mass-line under investigation can be compared with the background

Card 1/5

87372

S/120/60/000/004/011/028

E032/E414

Application of a Mass-Produced Mass-Spectrometer to the Study of
Evaporation of High Melting Point Materials

intensity, and the inclusion of a high-sensitivity ion current detector for use with substances whose vapour pressure under the experimental conditions which can be achieved with these spectrometers is relatively low. The present paper gives an account of these modifications as introduced in the MS-3 mass-spectrometer. The effusion chamber employed is shown in Fig.2, in which 1 is the effusion chamber, 2 is a heating spiral, 3 is a tantalum screen, 4 is a stainless steel screen, 5 is the body and 7 is a thermocouple. The dimensions of the effusion chamber are: internal diameter 5 mm, length 5.5 mm, diameter of effusion aperture 0.1 mm (or greater). The distance from the effusion aperture to the centre of the ionization region is about 10 mm. No details are given of the ionization device except for a statement that the ion source is a modified form of the normal ion source used in the MS-3 mass-spectrometer. In the case of temperatures between 1000 and 2000°C, the effusion chamber illustrated in Fig.3 was employed. The actual effusion

Card 2/5

87372

S/120/60/000/004/011/028
E032/E414

Application of a Mass-Produced Mass-Spectrometer to the Study of
Evaporation of High Melting Point Materials

chamber 4 is surrounded by a series of tantalum radiation shields 2 and the substance under investigation 6 is fitted into the effusion chamber as shown. The dimensions of the effusion chamber are as follows: internal diameter 3 mm, external diameter 5 mm, length of cavity 6 mm, effusion aperture diameter 0.05 mm (or greater). The temperature is measured pyrometrically to an accuracy of $\pm 5^\circ$ in the range 900 to 1400°C, and $\pm 10^\circ$ in the range 1400 to 2000°C. The low ion currents in the spectrometer are measured by the method described by Shutze and Bernhard (Ref.7) and Kuznetsov (Ref.8). Ions entering the entrance slit of the detector are accelerated through a negative potential of 5 to 10 kV and eject secondary electrons from a metal target. Secondary electrons with energies between 5 and 10 keV give rise to scintillations in a phosphor which are recorded by a photomultiplier. The sensitivity threshold of the instrument is 2×10^{-17} amp. The apparatus has been used in preliminary experiments to determine the heat of sublimation of silver. This quantity was found to be

Card 3/5

87372

S/120/60/000/004/011/028
EO32/E414

Application of a Mass-Produced Mass-Spectrometer to the Study of
Evaporation of High Melting Point Materials

65.0 \pm 0.9 kcal/g.at in the temperature interval 1115 to 1233°K.
The first effusion chamber has been used to study the vapour
composition and sublimation heats of sodium chloride (Ref.4),
lithium chloride and other inorganic compounds (Ref.10). The high-
temperature effusion chamber has been used to measure the heats of
sublimation of high melting point materials, as described by the
present authors in Ref.10 and 11. There are 5 figures and
11 references: 8 Soviet and 3 non-Soviet. ✓

ASSOCIATION: Khimicheskiy fakul'tet MGU
(Division of Chemistry, Moscow State University)

SUBMITTED: June 15, 1959

Card 4/5

AKISHIN, P.A.; GOROKHOV, L.N.; SIDOROV, L.N.

Mass-spectrometric study of cesium halides. Dokl. AN SSSR
135 no.1:113-116 N°60. (MIRA 13:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
Prestavleno akademikom V.N.Kondrat'yevym.
(Cesium halides)

AKISHIN, P.A.; GOROKHOV, L.N.

Kinetic energies of splinter ions and nature of the bond in molecular
ions of cesium halides. Vopr. Mekh. im. Ser. 2:3-6 Nov 1965.
(CIA 14:2)

1. Kafedra fizicheskoy khimii Moskovoyskogo universiteta.
(Cesium halides) (Ions)

S/078/61/006/001/013/019
B017/B054

11,3600

AUTHORS: Nikitin, O. T., Gorokhov, L. N.

TITLE: Composition of Beryllium Vapor

PERIODICAL: Zhurnal neorganicheskoy khimii, 1961, Vol. 6, No. 1,
pp. 224 - 225

TEXT: The state of evaporated beryllium was described in papers by V. M. Amonenko, L. N. Ryabchikov, G. F. Tikhinskiy, and V. A. Finkel' (Ref.6). The authors have now studied the composition of beryllium vapor by means of an MC-3 (MS-3) mass spectrometer. A table gives the results of mass-spectrometric investigations of beryllium vapor in the temperature range of from 1410 to 1620°K. Beryllium in vapor was found to be in an atomic form. There are 1 table and 13 references: 5 Soviet, 6 US, 1 British, and 1 German. ✓C

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: July 6, 1960

Card 1/1

20961

S/192/61/002/002/001/002
B130/B205

15-2210 1273. 1142, 1043

AUTHORS: Akishin, P. A., Gorokhov, L. N., and Khodeyev, Yu. S.

TITLE: Composition of lithium and sodium metaborate vapors

PERIODICAL: Zhurnal strukturnoy khimii, v. 2, no. 2, 1961, 209-210

TEXT: The composition of lithium and sodium metaborate vapors was determined by mass-spectrometric studies. This method has been used by the authors for an electron-diffraction study of the structure of metaborates (P. A. Akishin, V. P. Spiridonov, Zh. strukt. khimii, 2, 1, 63 (1960)). In preliminary experiments, Na and Li metaborates were evaporated on a platinum strip which replaced the cathode of the ion source used for the isotope analysis of gases. The mass spectra displayed ions of Me^+ ,

B^+ , BO^+ , BO_2^+ , MeBO_2^+ , and Me_2BO_2^+ . As the spectra of Na and Li metaborates are similar, further investigations were performed only with Li metaborate. As compared to the intensity of the ion LiBO_2^+ , the relative intensity of the ion Li_2BO_2^+ increases with a rise in temperature (the

Card 1/3

20961

S/192/61/002/002/001/002
B130/B205

Composition of lithium and ...

ratio $I_{Li_2BO_2^+}/I_{LiBO_2^+}$ changes from 0.33 at 700°C to 0.56 at 850°C).

The presence of $Li_2BO_2^+$ in the mass spectrum is indicative of the existence of more complex molecules than $LiBO_2$ in metaborate vapor. The congruence of the curves (Fig.) obtained by tests with deflecting condenser and an effusion chamber (nickel chamber) containing both the substance to be tested and an admixture of silver, has shown that $Li_2BO_2^+$ originates from a molecule $LiBO_2$ and is no fragment ion. The broadening of the curve of $Li_2BO_2^+$ ions, however, indicates an additional amount of kinetic energy, which is a characteristic feature of fragment ions. It was concluded that saturated vapor of Li and Na metaborates has a complex composition. One component is the molecule of type $MeBO_2$; the other component has not yet been exactly defined and requires further investigations. The mass spectrum of superheated Li metaborate vapor shows that in this case the chief component of the vapor is $LiBO_2$. There are 1 figure, 1 table, and 8 references: 5 Soviet-bloc and 3 non-Soviet-bloc.

Card 2/3

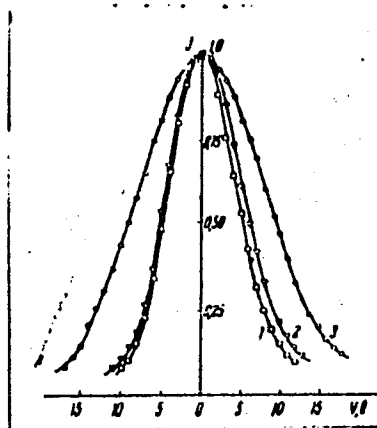
Composition of lithium and ...

20961
S/192/61/002/002/001/002
B130/B205

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: April 17, 1960

Figure: Relative intensity
as a function of deflecting
potential. Legend: 1) Ag^+ ;
2) LiBO_2^+ ; 3) Li_2BO_2^+ .



Card 3/3

GEROVICH, M.A. [deceased]; KAGANOVICH, R.I.; MAZITOV, Yu.A.; GOROKHOV, L.N.

Mechanism of ozone formation in the electrolysis of concentrated
perchloric acid solutions. Dokl. AN SSSR 137 no.3:634-637 Mr. '61.
(MIRA 14:2)

1. Moskovskiy gosudarstvennyy universitet im.M.V.Lomonosova. Pred-
stavleno akademikom A.N.Frumkinym.
(Ozone) (Perchloric acid)

GOROKHOV, L.N.

New calculation methods in mass spectrometer investigations
with a double effusion chamber, and the thermodynamic properties
of lithium iodide. Dokl. AN SSSR 142 no.1:113-116 Ja '62.

(MIRA 14:12)

1. Mōskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
Predstavleno akademikom V.N. Kondrat'yevym.

(Mass spectrometry)

(Lithium iodide)

GOROKHOV, L. N.; NIKITIN, O.T. ; PANCHENKOV, G. M.;

"Massenspektrometrische Isotopenanalyse an Titan"

Third Working Conference on Stable Isotopes 28 October to 2 November 1963, Leipzig.

GOROKHOV, L. N.

"Physical and chemical analyses of cervical secretion."

report submitted for 5th Intl Cong, Animal Reproduction & Artificial Insemination,
6-13 Sep 64, Trent, Italy.

BORISOV, Yu.A.; GUSAROV, A.V.; GOROKHOV, L.N.

Mass-spectrometric study of the evaporation of cesium superoxide.
Teplofiz. vys. temp. 2 no.3:487-489 Mye-Je '64. (MIRA 17:8)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

ACCESSION NR: AP4044519

S/0294/64/002/004/0535/0539

AUTHORS: Gusev, A. V.; Gorokhov, L. N.

TITLE: Determining mass-spectra of associates and their relative quantity in vapors of nonvolatile substances

SOURCE: Teplofizika vysokikh temperatur, v. 2, no. 4, 1964, 535-539

TOPIC TAGS: mass spectrum, vapor pressure, orifice outflow, monomer, cesium ion current/ MS 3 mass spectrometer

ABSTRACT: A uniform temperature method was used to determine the mass-spectra and composition of associate vapors as in the case of a monomer-dimer pair. Two types of effusive flow systems were used. The first consisted of two compartments stacked vertically and separated by a small orifice. The top chamber was filled with saturated vapor of a monomer-dimer pair with pressures p_m and p_d respectively. The bottom chamber contained an unsaturated vapor effusing through the orifice between the two compartments. To determine the individual mass-spectra and the composition of the vapor, the initial ion current was measured in both chambers. To minimize stability problems in the above method, a second system was used where the two chambers were connected horizontally through an orifice and the ion current was measured in both chambers.

Card 1/2

ACCESSION NR: AP4044519

rents were recorded simultaneously from two other orifices, one on each chamber. A MS-3 mass-spectrometer was used with special shutters to record consecutively the molecular beams from both orifices. An acceleration potential of 2.4 kilovolts and ionization potential of 75 volts were used with 1 ma current emission. The orifices were calibrated using cesium iodide vapor, with an efflux ratio $S_a/S_c = 1.23$ and the pressure ratio p_d/p_m determined subsequently. The mass-spectra of NaCl and CsJ vapors were recorded successfully using the above method. The relative intensities of Na^+ , $NaCl^+$, Na_2Cl^+ , Cs^+ , J^+ , CsJ^+ , and Cs_2J^+ were determined in the experiment. Orig. art. has: 6 formulas, 3 figures, and 2 tables.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: 12Feb64

ENCL: 00

SUB CODE: GC, GP

NO REF SOV: 006

OTHER: 002

Card 2/2

L 24782-65 EPF(c)/EWP(j)/EWT(m) Pc-4/Pr-4 RM

ACCESSION NR: AP4048609

S/0076/64/038/011/2674/2575

28
27
B

AUTHOR: Vilkov, L. V.; Gorokhov, L. N. Mastryukov, B. S.; Rusin, A. D.

TITLE: Molecular mass and mass spectrum of the vapors $\text{Ge}(\text{C}_2\text{H}_2)(\text{CH}_3)_2$

SOURCE: Zhurnal fizicheskoy khimii, v. 38, no. 11, 1964, 2674-2675

TOPIC TAGS: molecular mass, $\text{Ge}(\text{C}_2\text{H}_2)(\text{CH}_3)_2$, mass spectrum, dimeric molecule, vapor, monomeric ion

ABSTRACT: The authors have investigated the mass spectrum, and determined the molecular mass of the vapors of $\text{Ge}(\text{C}_2\text{H}_2)(\text{CH}_3)_2$ with the mass spectrometer MI-1305. The spectrum indicates the presence of dimeric molecules with the mass numbers 252-265, 237-249, 211-223, and 115-121, which are assigned to various ions. Particularly strong is the group of lines 85-91 [$\text{Ge}(\text{CH}_3)^+$ -ion]. The monomeric ion was not detected. The average molecular mass is 234. "The author is grateful to M. E. Vol'pin and Dulova for discussions." Orig. art. has: 1 figure.

Card 1/2

L 24782-65

ACCESSION NR: AP4049609

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonova,
Khimicheskiy fakul'tet (Moscow State University, Chemistry Department)

SUBMITTED: 14Aug63

ENCL: 00

SUB CODE: ME, GP

NO REF SOV: 003

OTHER: 001

Card 2/2

SEMENENKO, K.N.; NAUMOVA, T.N.; COROKHOV, L.N.; SEMENOVA, G.A.; NOVOSELOVA, A.V.

Interaction between the chlorides of Al and Fe. Dokl. AN SSSR
154 no.1:169-170 Ja'64. (MIRA 17:2)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
2. Chlen-korrespondent AN SSSR (for Novoselova).

SEMENENKO, K.N.; NAUMOVA, T.N.; GOROKHOV, L.N.; NOVOSELOVA, A.V.

Interaction between the chlorides of aluminum and beryllium.
Dokl. AN SSSR 154 no. 3:648-649 Ja '64. (MIRA 17:5)

1. Moskovskiy gosudarstvennyy universitet im.M.V.Lomonosova.
2. Chlen-korrespondent AN SSSR (for Novoselova).

MEDVEDEV, V.A.; YUNGMAN, V.S.; VOROB'YEV, A.F.; GURVICH, L.V.;
BERGMAN, G.A.; REZNITSKIY, L.A.; KOLESOV, V.P.;
GAL'CHENKO, G.L.; KHODEYEV, Yu.S.; KHACHKURUZOV, G.A.;
SOKOLOV, V.B.; GOROKHOV, L.N.; MONAYENKOVA, A.S.;
KOMAROVA, A.F.; VEYTS, I.V.; YURKOV, G.N.; MALENKOV, G.G.;
SMIRNOVA, N.L.; GLUSHKO, V.P., akademik, otv. red.;
MIKHAYLOV, V.V., red.; KARAPET'YANTS, M.Kh., red.

[Thermal constants of substances; reference book in ten
numbers] Termicheskie konstanty veshchestva; spravochnik
v desiati vypuskakh. Moskva, No.1. 1965. 144 p.
(MIRA 18:7)

1. Moscow. Vsesoyuznyy institut nauchnoy i tekhnicheskoy
informatsii.

GOROKHOV, I.N.

Mass spectrum of 1,1-dichlorogermirene vapors. Zhur.strukt.khim.
6 no.5:766-768 S-O '65. (MIRA 18:12)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
Submitted December 2, 1964.

GOROKHOV, L.P.

Transfer of rotary hearth furnaces from coal to gas firing is a
new development in the dehydration of carnallite. TSvet. met. 34
no.5:74-75 My '61. (MIRA 14:5)
(Rotary hearth furnaces--Combustion) (Carnallite)

GOROKHOV, L.P.; LEVIN, M.I.

Modeling of the structures of telecommunication systems. Sbor. rab. po
vop. elektromekh. no.9:238-250 '63. (MIRA 17:2)

GOROKHOV. L.P., inzh.

Multichannel angle-to-code converter. Priborostraniie no.9:29 S '65.
(MIRA 18:10)

L 15287-66 EWT(d)/EWT(1)/EWA(h)/EWP(1) LIP(c) BB/3G

ACC NR: AP5028964

SOURCE CODE: UR/0119/64/000/009/0029/0029

AUTHOR: Gorokhov, L. P. (Engineer)

ORG: none

TITLE: Multichannel shaft digitalizer

SOURCE: Priborostroyeniye, no. 9, 1964, 29

TOPIC TAGS: digitalizer, shaft digitalizer

ABSTRACT: An original (Author's Certificate no. 161649, Bull. izobr., 1964, no. 7) multichannel angle-to-code converter^{13, 14} or digitalizer is described (see fig. below). Phase shifters 1 are used as reference elements, whose 3-phase windings are supplied by generator 2. Directly coupled to the generator is pulse generator 3. A definite constant number of pulses taken from readout head 4 corresponds to the supply-voltage phase shift through 360°. Signals from the pulse generator are supplied to counter 5 whose zero reading is set by "shaper" 6. Gate 7 ensures sending the contents of 5 to the computer. This device permits using a standard instrument (selsyn) as a phase shifter²⁵ and is particularly suitable for those computers which use magnetic drums. Orig. art. has: 1 figure.

Card 1/2

UDC: 621.372.632:681.142.622

2

GOROKHOV, L.S., inzhener; MINCHENKOV, I.F., inzhener.

Oxidation of molten steel during and after removal from the open hearth furnace. Stal' 16 no.10:934-935 O '56. (MIRA 10:9)

1: Kulebaskiy metallurgicheskiy zavod.
(Open hearth furnaces) (Steel--Metallurgy)

The authors consider that the oxidation of steel during tapping occurs in the stream and not in the ladle and suggest experiments to decide the extent of oxidation inside and outside the furnace. They consider many of the N.S.Mikhailets' recent statements on this subject misleading. -- S.K.

SHCHERBAKOV, V.A.; AEROSIMOV, Ye.V.; STUL'PIN, Ye.A.; GOROKHOV, L.S.

Mechanism of slag formation during the melting period in high capacity open-hearth furnaces. Izv.vys.ucheb.zav.; chern.met. 5 no.11:48-56 '62. (MIRA 15:12)

1. Moskovskiy institut stali i splavov.
(Open-hearth process) (Slag)

GOROKHOV, L.S., inzh.; ABROSIMOV, Ye.V., kand.tekhn.nauk; SHCHERBAKOV, V.A.,
inzh.; STUL'PIN, Ye.A., inzh.; SABIYEV, M.P., inzh.;
PLOSHCHENKO, Ye.A., inzh.

Interrelation of the conditions of carbon oxidation and the
introduction of additives with the thermal parameters of the
ore boil during smelting in large furnaces. Stal' 23 no.5:
404-408 My '63. (MIRA 16:5)
(Open-hearth process)

PIKULIN, S.A.; SHCHERBAKOV, V.A.; DONSKAYA, S.N.; GOROKHOV, L.S.

X-ray diffraction study of the phase composition of open-hearth
slags during the smelting period. Zav. lab. 30 no.9:1102-
1105 '64. (MIRA 18:3)

1. Moskovskiy institut stali i splavov.

GOROKHOV, L.S. inzh.; TERZIYAN, P.G., inzh.; ABROSIMOV, Ye.V., kand.tekhn.
nauk; SABIYEV, M.P., inzh.

Hydrodynamics of open-hearth furnace baths. Stal' 24 no.7:604-606
Jl '64. (MIRA 18:1)

GOROKHOV, M.

Coal Mines and Mining

Struggling to exceed the planned output of mine. Mast.ugl. 2, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

GOROKHOV, M.

Provide better assistance to permanent production conferences.
Kozh.-obuv.prom. 2 no.1:39 Ja '60. (MIRA 13:5)

1. Predsedatel' fabrika Minskoy kozhgalantereynoy fabriki imeni
Kuybysheva.

(Minsk--Leather industry)

(Employees' representation in management)

GOROKHOV, M.N.

Introducing nozzles for a gas-electric burner for semi-automatic welding. Biul.tekh.-ekon.inform.Gos.nauch.-issl. inst.nauch.i tekhn.inform. no.8:48-49 Ag '65.

(MIRA 18:12)

GOROKHOV, M.S.

PHASE I BOOK EXPLOITATION

238

Betekhtin, Sergey Aleksandrovich; Vinit'skiy, Andrey Mikhaylovich,
Gorokhov, Mikhail Semnovich; Stanyukovich, Kirill Petrovich;
Fedotov, Ivan Dmitriyevich.

Gazodinamicheskiye osnovy vnutrenney ballistiki (Gas Dynamic Principles
of Interior Ballistics) Moscow, Oborongiz, 1957. 384 p. 4,500
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Doctor of Technical Sciences, Professor; Ed.: Malyshev, M.V.,
Engineer; Ed. in charge: Sokolov, A.I.; Publishing Ed.:
Bogomolova, M.F.; Tech. Ed.: Zudakin, I.M.

Card 1/10

238

Gas Dynamic Principles of Interior Ballistics (Cont.)

PURPOSE: This book was approved by the Ministry of Higher Education of the USSR as a manual for higher technical institutes. It can also serve as a textbook for university students of mechanics and mathematics, and for students of higher military institutes.

COVERAGE: This work contributes to the theory of internal ballistics by including chapters on wave processes occurring during a discharge. Principles of gas dynamics of transient processes are presented as a new element in the study of internal ballistics. The analytical solution of the Lagrange ballistic problem and the motion of a missile and of the gas-powder mixture in the case of true burning are discussed. These problems are also treated numerically. Simple and accurate solutions of problems in classical internal ballistics for relatively large projectiles are given by means of the generalized Drozdov method. One of the coauthors of this work, Betekhtin S.A., died in 1953, in the line of duty.

Card 2/10

238

Gas Dynamic Principles of Interior Ballistics (Cont.)

Chapter VI was written by S.A. Betekhtin, Chapter III and IV by S.M. Vinit'skiy, Chapter II by S.M. Vinit'skiy and K.P. Stanyukovich; Chapter VIII was written by S.M. Gorokhov, Chapters I and V and the introduction by K.P. Stanyukovich and Chapter VII by I.D. Fedotov. There are 82 figures, 59 tables, and several references in footnotes.

TABLE OF CONTENTS:

Preface	3
Introduction	4

Card 3/10

Gas Dynamic Principles of Interior Ballistics (Cont.)

238

Ch. I. Certain Data From Thermodynamics and Gas Dynamics

7

1. Basic thermodynamic laws for gases from powders 7
2. Basic equations for the linear flow of gas and their solutions 18
3. Unidirectional rarefaction wave 30
4. Reflection of rarefaction waves 35
5. Unidirectional pressure waves 44
6. Basic characteristics of the nonsteady flow of gases 50
7. Propulsion of objects by combustion products 54

Ch.II. Analytical Solution of the Lagrange Problem

65

Card 4/10

238

Gas Dynamic Principles of Interior Ballistics (Cont.)

- 8. Formulation of the problem, basic tolerances, and the wave system 65
- 9. Construction of differential equations 76

Ch. III. Problem of the Motion of a Piston and a Gas Chamber Inside a Tube Closed at One End, Acted Upon by a Gas Flow From the Piston Chamber Into the Closed Tube Space, Without Taking Wave Processes Into Account 105

- 11. Formulation of the problem, assumptions, and construction of differential equations of motion 105

Ch. IV. Problem of the Motion of a Piston and a Gas Chamber Inside a Tube Closed at One End, Acted Upon by a Gas Flow From the Piston Chamber Into the Open Tube Space Behind the Piston, Taking Into Account the Effect of the First Wave Reflected From the Tube Bottom 112

Card 5/10